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EXAMINER
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MCELWAIN, ELIZABETH F

ART UNIT	PAPER NUMBER
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1638

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/773,303  
Application Number: 90/005,892  
Filing Date: January 31, 2001  
Appellant(s): PROCTOR, LARRY M.

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David J. Lee  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed October 23, 2006 appealing from the Office action mailed December 21, 2005.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

An updated litigation search was performed on November 28, 2006. The results of this search agree with appellant's statement.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

No amendment after final has been filed.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct with the exception that the rejection of claim 57 under 35 U.S.C. 112, second paragraph was

withdrawn in the Office Action of December 21, 2005, in view of the amendment of the claim in the response filed October 14, 2005. While claim 57 was maintained in the statement of the rejection in the Office Action of December 21, 2005, the inclusion of this claim was unintentional, as this rejection was withdrawn in the text of the rejection. The Examiner regrets any confusion resulting from this discrepancy.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

Please note that these applications were originally paper file folders with supporting documents provided in boxes. All of the papers associated with these files were converted to electronic form by scanning the papers into IFW in the fall of 2004. When the papers were scanned into the electronic format, many of the supporting documents were identified by dates that do not correspond to the dates the documents were originally filed. Given the discrepancy in the dates, a location that each document can now be found in the IFW file for case Serial Number 09/773,303 is provided by date with each citation below. Please note that the locations for the citations in the reexam application may differ from those of 09/773,303.

**Declaration of Gil Waibel**

Provided in the Evidence Appendix attached to the Brief filed October 23, 2006 at pages 51-58 in 09/773,303 e-file

**Polly Proctor Declaration filed with the response of May 28, 2004**

Provided in the Evidence Appendix attached to the Brief filed October 23, 2006 at pages 59-64 in 09/773,303 e-file

**Polly Proctor Declaration filed with the response of March 25, 2003**

Provided in IFW at AF/D dated March 25, 2003 in 09/773,303 e-file

**Pod-Ners' Response to Defendants' Motion to Compel**

Provided in the Evidence Appendix attached to the Brief filed October 23, 2006 at pages 65-74 in 09/773,303 e-file

**Larry Proctor Declaration including 7.5Y page of Munsell Book**

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Submitted with October 14, 2005 RCE

Provided in the Evidence Appendix attached to the Brief filed October 23, 2006 at pages 75-77  
in 09/773,303 e-file

Larry Proctor Declaration

Submitted with response of March 25, 2003

Provided in IFW at AF/D dated March 25, 2003 in 09/773,303 e-file

Bassett et al, ASHS Journals Online (2000)

Provided in the Evidence Appendix attached to the Brief filed October 23, 2006 at pages 79-90  
in 09/773,303 e-file

Pallotini et al. (Crop Science 44: 968-977, 2004)

Provided in the Evidence Appendix attached to the Brief filed October 23, 2006 at pages 91-99  
in 09/773,303 e-file

Laura Conley Declaration

Provided in the Evidence Appendix attached to the Brief filed October 23, 2006 at pages 100-123 in 09/773,303 e-file

Kaplan (Guitarrero Cave, p. 146, 1980)

Provided in the Evidence Appendix attached to the Brief filed October 23, 2006 at pages 124-125 in 09/773,303 e-file

Hernandez-Xolocotzi (Seminar Series 2E, CIAT, p. 253-258, 1973)

Provided in the Evidence Appendix attached to the Brief filed October 23, 2006 at pages 126-132 in 09/773,303 e-file

Voysest (Varieties of Beans in Latin America, CIAT, p. 47-50, 1983)

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Provided in the Evidence Appendix attached to the Brief filed October 23, 2006 at pages 133-139 in 09/773,303 e-file

Azufrado Peruano 87 (Secretaria de Agricultura Y Recursos Hidraulicos; Solicitud de Inscripcion en el Registro Nacional de Variedades de Plantas, Registration No. FRI-150288-042, 1989.

Provided at the NPL documents dated February 12, 2002, Prior Art NPL document 174 in 09/773,303 e-file.

Website: [http://mun/ca/biology/scarr/4241\\_F\\_Quantitative\\_Genetics.html](http://mun/ca/biology/scarr/4241_F_Quantitative_Genetics.html), July 18, 2005 printout

Provided in the Evidence Appendix attached to the Brief filed October 23, 2006 at pages 40-48

Website: [usna.usda.gov/Gardens/glossary.html](http://usna.usda.gov/Gardens/glossary.html)

Provided in IFW at Prior Art NPL document 5 dated April 14, 2005 in 09/773,303 e-file

CIAT Accession No. G13 094 (deposited 1979; in CIAT *Phaseolus vulgaris* Catalog, 1992)

Provided at the NPL documents dated June 4, 2002, Prior Art NPL document 162 in 09/773,303 e-file.

CIAT Accession No. G02 400 (deposited 1970; in CIAT *Phaseolus vulgaris* Catalog, 1992)

Provided at the NPL documents dated June 4, 2002, Prior Art NPL document 163 in 09/773,303 e-file.

CIAT Accession No. G22 215 (deposited 1986; in CIAT *Phaseolus vulgaris* Catalog, 1992)

Provided at the NPL documents dated June 4, 2002 at citation 14, Prior Art NPL document 164 in 09/773,303 e-file.

CIAT Accession No. G22 227 (deposited 1986; in CIAT *Phaseolus vulgaris* Catalog, 1992)

Provided at the NPL documents dated June 4, 2002 at citation 15, Prior Art NPL document 165 in 09/773,303 e-file.

CIAT Accession No. 622 230 (deposited 1986; in CIAT *Phaseolus vulgaris* Catalog, 1992)  
Provided at the NPL documents dated June 4, 2002 at citation 16, Prior Art NPL document 166 in 09/773,303 e-file.

CIAT Accession No. G11 891 (deposited 1980; in CIAT *Phaseolus vulgaris* Catalog, 1992)  
Provided at the NPL documents dated June 4, 2002 at citation 17, Prior Art NPL document 167 in 09/773,303 e-file.

#### **(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

#### ***35 USC § 112, first paragraph, new matter***

Claims 59 and 62, and claims 60, 61, 63 and 64 dependent thereon, stand rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention, as set forth in the Office Action of April 5, 2005.

Claim 59 recites “wherein the yellow color plotted as a distribution in the population of the seed of sufficient number for purposes of ATCC deposit has a peak occurrence ranging”; and Claim 62 recites “as evidenced by a substantially uniform yellow color of the seed coat, wherein



the substantially uniform yellow color plotted as a distribution in a population of the seed of sufficient number for purposes of ATCC deposit has a peak occurrence ranging”. However, these phrases were not present in the specification as originally filed, and the subject matter now claimed was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor, at the time the application was filed, had possession of the claimed invention.

***35 USC § 112, first paragraph, written description***

Claims 1-15, 51, 52 and 56-64 stand rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention, as set forth in the Office Action of September 25, 2002, and modified in the Office Action of December 12, 2003 in response to Appellant’s assertions and evidence filed March 25, 2003.

The invention of claims 8-15, 51, 52 and 56-64 is directed to a *Phaseolus vulgaris* field bean plant, as well as seed, pollen and propagation material thereof, that produces seed having a seed coat that is yellow in color, wherein the yellow color is from about 7.5 Y 8.5/4 to about 7.5 Y 8.5/6 in the *Munsell Book of Color* when viewed in natural light. Appellant further claims said plant, propagation material, pollen, and seed, wherein said seed has a hilar ring that is tan in color, wherein the tan color is from about 2.5 Y 9/4 to about 2.5 Y 9/6 in the *Munsell Book of Color* when viewed in natural light. In addition, Appellant claims said seed further germinates in

the dark, is cuboid in shape, and has a dry seed weight of about 43 grams per 100 seeds.

Furthermore, claims 59-64 are more broadly drawn to a yellow seed from a population having a distribution of yellow, wherein the peak distribution occurs in the range of about 7.5 Y 8.5/4 to about 7.5 Y 8.5/6 in the *Munsell Book of Color* when viewed in natural light.

Appellant describes a single cultivar, Enola (seed deposited as ATTC Accession Number 209549) that has the claimed seed characteristics of yellow seed coat of from about 7.5 Y 8.5/4 to about 7.5 Y 8.5/6 in the *Munsell Book of Color* when viewed in natural light, tan hilar ring of from about 2.5 Y 9/4 to about 2.5 Y 9/6, smooth texture, pleasing taste, absorbs large volumes of water, germinates in the dark, is cuboid in shape, and has a dry seed weight of about 43 grams per 100 seeds. Appellant does not describe other cultivars with the claimed characteristics, and hence it is not clear from the instant specification that the Appellant was in possession of the invention as broadly claimed.

In addition, claims 1-7 are included in the rejection because Appellant has not provided an adequate written description of the deposited mixture of seeds, given that Appellant has submitted conflicting evidence with regard to the description of the seeds in the deposit.

Appellant provides one set of characteristic traits for the deposited seeds in the specification at column 4, line 59 to column 5, line 51. However, in Appellant's response filed March 25, 2003 at page 6, paragraphs 3 and 4, Appellant makes assertions that the seeds deposited as ATCC Accession Number 209549 represent a variety of genetic entities with a range of sizes, shapes and colors of both seed coat and hilar ring. In addition, Appellant provided evidence of the genetic diversity of the deposited seeds in the Declaration of Laura Conley, a copy of which is provided in the Evidence Appendix attached to the Brief filed October 23, 2006 at pages 100-123

(see numbered paragraphs 13, 16 and 21-23). The diversity of genotype and phenotype of the deposited seeds is not described in the specification, as originally filed.

The Federal Circuit has clarified the application of the written description requirement. The court stated that a written description of an invention "requires a precise definition, such as by structure, formula, [or] chemical name, of the claimed subject matter sufficient to distinguish it from other materials." *University of California V. Eli Lilly and Co.*, 119 F.3d 1559, 1568; 43 USPQ2d 1398, 1406 (Fed. Cir. 1997). The court also concluded that "naming a type of material generally known to exist, in the absence of knowledge as to what that material consists of, is not a description of that material." Further, the court held that to adequately describe a claimed genus, Appellant must describe a representative number of the species of the claimed genus, and that one of skill in the art should be able to "visualize or recognize the identity of members of the genus." *Id.*

In the instant specification, Appellant has described a single cultivar of *Phaseolus vulgaris*, Enola (ATCC Accession Number 209549), having a unique set of phenotypic characteristics, prepared by repeated selfing and selection of field beans from a mixed package of beans purchased in Mexico. The described Enola cultivar has all of the claimed characteristics, i.e. seed of Enola plants have a seed coat that is yellow in color, wherein the yellow color is from about 7.5 Y 8.5/4 to about 7.5 Y 8.5/6 in the *Munsell Book of Color* when viewed in natural light (column 5, lines 32-36). Seed also have a hilar ring that is tan in color, wherein the tan color is from about 2.5 Y 9/4 to about 2.5 Y 9/6 (col. 5, lines 36-39). Furthermore, the seed have a smooth texture (column 4, line 21), pleasing taste (column 4, line 21), cuboid shape (column 5, lines 40-41), and a dry seed weight of 43 grams per 100 seeds (column 5, lines 41-43), and the

seed absorb large volumes of water (column 4, lines 21-23) and germinate in the dark (column 5, lines 38-39).

Enola also has a myriad of other disclosed phenotypic characteristics including: average height of 34.9 cm.; strong and erect stem and branches; scattered pods; good lodging resistance; wrinkled, dull, and ovate leaves; white flowers with white wings and keel; solid green, pear-shaped pods with straight beaks at onset; solid tan, pear-shaped pods with variable pod break; 3.1 seeds/pod; no anthocyanin pigmentation in flowers, stems, pods, seeds, leaves, petioles, peduncles and nodes; heat tolerance; some resistance to *Fusarium* root rot; average maturity 101 days (Example 1).

Appellant has not described a representative number of cultivars of the claimed genus to adequately describe the claimed genus. Appellant only describes the Enola cultivar that falls within the scope of the genus of field bean cultivars having the claimed seed characteristic of yellow seed coat of from about 7.5 Y 8.5/4 to about 7.5 Y 8.5/6 in the *Munsell Book of Color* when viewed in natural light. Appellant has not described other *Phaseolus vulgaris* cultivars in terms of the many distinguishing phenotypic characteristics that have been described for Enola. In the absence of a thorough description of other *Phaseolus vulgaris* cultivars within the scope of the genus, it is not clear if Appellant was in possession of other *Phaseolus vulgaris* cultivars that meet the claimed genus of *Phaseolus vulgaris* plants producing seed with the characteristic of yellow seed coat of from about 7.5 Y 8.5/4 to about 7.5 Y 8.5/6 in the *Munsell Book of Color* when viewed in natural light.

In addition, Appellant has submitted conflicting evidence with regard to the description of the seeds of the deposit in the specification. As stated *supra* at pages 6-7, Appellant makes

assertions that the seeds deposited as ATCC Accession Number 209549 represent a variety of genetic entities with a range of sizes, shapes and colors of both seed coat and hilar ring. The diversity of genotype and phenotype of the deposited seeds is not described in the specification, as originally filed.

Therefore, The specification does not provide an adequate written description of the claimed invention. The specification does not adequately describe a genus of *Phaseolus vulgaris* field bean plant, as well as seed, pollen and propagation material thereof, that produces seed having a seed coat that is yellow in color, wherein the yellow color is from about 7.5 Y 8.5/4 to about 7.5 Y 8.5/6 in the *Munsell Book of Color* when viewed in natural light, as recited in Claims 8-15, 51, 52, and 54-58. Neither has Appellant provided an adequate written description of the deposited seed of claims 1-7. The description of the seeds and plants provided in the specification does not correspond with Appellant's present assertions regarding the characteristics of the claimed and deposited yellow bean seeds.

***35 USC § 112, first paragraph, enablement***

Claims 1-15, 51, 52, and 56-58 stand rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claims contain subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. This rejection is set forth in the Office Action of December 2, 2003, in view of Appellant's arguments and declarations submitted March 25, 2003.

*In re Wands*, 858F.2d 731, 8 USPQ2d 1400 (Fed. Cir. 1988) lists eight considerations for determining whether or not undue experimentation would be necessary to practice an invention. These factors are: the quantity of experimentation necessary, the amount of direction or guidance presented, the presence or absence of working examples of the invention, the nature of the invention, the state of the prior art, the relative skill of those in the art, the predictability or unpredictability of the art, and the breadth of the claims.

#### ***Claim breadth***

The claims are broadly drawn to a *Phaseolus vulgaris* field bean plant, as well as seed, pollen and propagation material thereof, that produces seed having a seed coat that is yellow in color, wherein the yellow color is from about 7.5 Y 8.5/4 to about 7.5 Y 8.5/6 in the *Munsell Book of Color* when viewed in natural light. Appellant further claims said plant, propagation material, pollen, and seed, wherein said seed has a hilar ring that is tan in color, wherein the tan color is from about 2.5 Y 9/4 to about 2.5 Y 9/6. And Appellant claims said seed which germinates in the dark, is cuboid in shape, and has a dry seed weight of about 43 grams per 100 seeds. Appellant also claims a *Phaseolus vulgaris* field bean seed designated Enola, and plants and pollen thereof, deposited with the American Type Culture Collection under Accession Number 209549, as well as a method of crossing said plant with another field bean plant.

#### ***Guidance***

Appellant teaches the cultivar, Enola (seed deposited as ATTC Accession Number 209549) that has the claimed seed characteristics of yellow seed coat of from about 7.5 Y 8.5/4 to about 7.5 Y 8.5/6 in the *Munsell Book of Color* when viewed in natural light, tan hilar ring of from about 2.5 Y 9/4 to about 2.5 Y 9/6, germinates in the dark, is cuboid in shape, and has a dry

seed weight of about 43 grams per 100 seeds. Appellant teaches that the Enola cultivar was developed as follows: yellow beans were selected from a mixed bag of dry edible beans purchased in Mexico in 1994 (column 2, line 63 to column 3, line 3); the seeds were planted and allowed to self-pollinate; plants with small leaves, good pod adherence and pod shattering resistance were selected, allowed to self-pollinate, and seeds thereof planted in 1995 (column 3, lines 3-15); plants with good pod adherence, pod shattering resistance, and greater than average yield were selected, allowed to self-pollinate, and seeds thereof planted in 1996 (column 3, lines 15-24); plants with good pod adherence, pod shattering resistance, and higher yield were selected and bulked to produce the Enola cultivar (column 3, lines 24-29). Appellant discloses at column 4, lines 30-37 of the specification, that the Enola cultivar:

"has shown uniformity and stability for all traits, as described in Example 1, which contains a description of variety information. The cultivar has been self-pollinated a sufficient number of generations, with careful attention to uniformity of plant type to ensure phenotypic stability. The cultivar has been increased with continued observation of uniformity. No variant traits have been observed or are expected in Enola."

***Working example***

Example 1 provides a detailed description of the characteristics of Enola, including plant habit, leaf morphology, flower color, pod morphology at onset and maturity, seed color, seed shape and weight, anthocyanin pigmentation, disease and stress reactions, and maturity. Appellant does not teach other cultivars with the claimed characteristics. Furthermore, the Declaration of Larry Proctor attests to the number of generations of selection, and to the

uniformity and stability of the Enola cultivar (Larry Proctor Declaration filed March 25, 2003, numbers 6-12 and provided in IFW at AF/D of this date). Based on the patent disclosure, it is presumed that Enola seed that is deposited as ATCC Accession Number 209549 is a bean cultivar of uniform genetic and phenotypic composition. Based on the characteristics set forth in the patent disclosure for search and examination of the claims, the Examiner indicated in the Office action of September 25, 2002 that claims directed to the deposited line (claims 1-7) were allowed.

***Unpredictability (as evidenced by contradictory results)***

However, in the response filed March 25, 2003, Appellant asserted that the seeds deposited as ATCC Accession Number 209549 are *not* the seeds of a single genetic entity. Rather the seeds represent *many* genetic entities, with a range of sizes, shapes and colors, both of seed coat and hilar ring. Furthermore, the plants, pods and seeds display a diversity of characteristics. Appellant submits the Declaration of Laura L. Conley as further evidence of the genetic diversity among the deposited seeds and plants (response of March 25, 2003, page 6, third paragraph). The Declaration discusses AFLP evidence presented as expert testimony by Paul Gepts during litigation to demonstrate the genetic diversity among individual plants of the Enola bean deposited with ATCC. In particular, individuals 1, 51, 52 and 53 are compared, and shown to differ using multiple AFLP markers (Conley Declaration filed March 25, 2003, numbers 10-15, Exhibits A and B and provided as an attachment to the Brief filed October 23, 2006 at pages 100-123). In view of these assertions by Appellant, it is submitted that the claims to the deposited ATCC Accession Number 209549 are not enabled.



The deposit of seed provides a reproducible means of making a genetically and phenotypically unique plant that cannot be recreated based on a patent disclosure.

Hence, it has become routine in the plant breeding art to deposit seed of a genetically homogeneous line of plants, in order to obtain a plant utility patent. It is by deposit that the enablement is satisfied because it allows one of skill in the art to *reproducibly* make the same genetic entity. In the instant case, based on the Appellant's arguments filed March 25, 2003 and the Conley Declaration, it appears that the seed deposited as ATCC Accession Number 209549 consists of a *diverse* population of genotypically and phenotypically distinct seed. Such a deposit does not enable the invention because it does not allow one of skill in the art to reproduce the same invention. Each sample of seed obtained from ATCC would consist of a *different* mixture of seed resulting in a *different* heterogenous population of plants. Therefore, Appellant has not enabled the invention by deposit of the seed.

#### ***Lack of guidance***

However, even if the deposited seed represent a uniform, single cultivar of field bean, as indicated in the patent disclosure itself, Appellant has still failed to provide guidance for how to make other cultivars of field bean with the claimed characteristics of seed having a seed coat that is yellow in color, wherein the yellow color is from about 7.5 Y 8.5/4 to about 7.5 Y 8.5/6 in the *Munsell Book of Color* when viewed in natural light, a hilar ring that is tan in color, wherein the tan color is from about 2.5 Y 9/4 to about 2.5 Y 9/6, germinates in an environment free of light, is cuboid in shape, and/or has a dry seed weight of about 43 grams per 100 seeds. Appellant asserts in the response filed March 25, 2003 that "[P]rior to that trip [to Mexico], the applicant

has never seen yellow beans, either in Mexico or the United States" (response filed March 25, 2003, page 14, fourth paragraph).

Hence, in the absence of seed used for the selection of the claimed yellow bean seeds and/or in absence of the deposited Enola seed, it is unclear how one of skill in the art can practice the claimed invention. Methods of plant breeding do not allow for the creation of a desired characteristic out of thin air. Hence, it would appear that without a readily available source of germplasm containing the yellow seed coat characteristic, undue trial and error experimentation would be required to screen through the myriad of *Phaseolous vulgaris* plants available in the world, and progeny plants derived therefrom, to identify other field bean plants with the claimed characteristics.

Furthermore, it is submitted that not even seeds of the deposited Enola line or plants produced from the deposited Enola line of Accession Number 209549 meet the enablement requirement. As stated *supra*, Appellant has submitted conflicting evidence with regard to the description of the seeds in the deposit. Appellant provided one set of characteristic traits for the deposited seeds in the specification. However, in Appellant's response filed March 25, 2003, Appellant made assertions that the seeds deposited as ATCC Accession Number 209549 represent a variety of genetic entities with a range of sizes, shapes and colors of both seed coat and hilar ring. In addition, Appellant provided evidence of the genetic diversity of the deposited seeds in the Declaration of Laura Conley, filed March 25, 2003 cited above. However, Appellant does not discuss the genotypic and phenotypic variability of the deposited seeds in the specification. And the specification fails to provide guidance with regard to selecting yellow beans having the stable and uniform traits of a yellow bean designated Enola from the deposited

mixture of seeds. In fact, the specification does not set forth *any* specific stable and uniform traits that identify the seeds of the invention.

When the *Wands* factors are weighed, given the broad scope of the claims, wherein Appellant has asserted that the claimed seeds comprise a range of phenotypes and genotypes; given the lack of guidance in the specification with respect to production of plants and seeds with the claimed characteristics; given the statements by Appellant in the response filed March 25, 2003 indicating that even ATCC Accession Number 209549 does not comprise a reproducible genetically uniform field bean cultivar; and given the high level of unpredictability of breeding plants for a particular phenotypic trait, particularly when a parental source of a desired characteristic is unavailable; it is concluded that undue experimentation would be required to practice the invention, and therefore the invention is not enabled.

***35 USC § 112, second paragraph***

Claims 1-7 and 59-64 stand rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention, as set forth in the Official action mailed September 25, 2002, and in part as a result of Appellant's statements and the Polly Proctor Declaration filed March 25, 2003 and recorded in IFW at this date, and the Conley Declaration attached to the Brief filed October 23, 2006 at pages 100-123.

Claim 1, and claims dependent thereon, are indefinite in view of Appellant's statement that:

"the seeds deposited with the ATCC are not seeds of a genetic entity. Rather, the seeds represent a variety of genetic entities with a range of sizes, shapes and colors, both seed coat and hilar ring. Furthermore, when a growout was conducted using seeds from the same source as the ATCC seeds, the plants, pods and seeds displayed a comparable diversity of characteristics." (response filed March 25, 2003, p. 6, third paragraph).

This statement is supported by Appellant in the submission of the Declarations of Polly Proctor and of Laura L. Conley cited above. Given the diversity of the population present in the ATCC deposit, the metes and bounds of the claimed invention are unclear. It is not apparent to the examiner how one skilled in the art would know whether or not one was infringing the claimed invention, given Appellant's failure to adequately define the seed, and plants that are encompassed by the claims. For deposit, Appellant is required to deposit 2500 seeds. If those 2500 seed consist of multiple plant genotypes that are represented in differing amounts, it is not clear how one would be able to determine from a single sample of those 2500 seed which plant genotypes infringe the claimed invention, and which plant genotypes do not. In such a situation, it is also quite possible that multiple samples of the 2500 seed would reveal additional genotypes that are encompassed by the invention. Appellant is advised that 35 USC 112, second paragraph requires Appellant to "clearly and distinctly" define the claimed invention. In the instant case, it is submitted that Appellant has not met this burden by deposit of a genotypically and phenotypically divergent population of seed.

Claim 59, and claims 60 and 61 dependent thereon, are indefinite in the recitation of "wherein the yellow color plotted as a distribution in the population of the seed of sufficient

number for purposes of ATCC deposit has a peak occurrence ranging”, as set forth in the Office Action of April 14, 2005 and argued in the Office Action of December 21, 2005. The Examiner maintains that the phrase is not comprehensible. It is not clear what is intended, and it is not clear what the yellow color would be. The metes and bounds of the claims are not clearly set forth.

Claim 62, and claims 63 and 64 dependent thereon are indefinite in the recitation of “as evidenced by a substantially uniform yellow color of the seed coat, wherein the substantially uniform yellow color plotted as a distribution in a population of the seed of sufficient number for purposes of ATCC deposit has a peak occurrence ranging”, as set forth in the Office Action of April 14, 2005 and argued in the Office Action of December 21, 2005. The Examiner maintains that the phrase is not comprehensible. It is not clear what is intended, and it is not clear what the yellow color would be. The metes and bounds of the claims are not clearly set forth.

***35 USC § 102 or 103***

Claims 1-15, and 51, 52, and 54-58 stand rejected under 35 U.S.C. 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over any of CIAT Accession No. G13 094 (deposited 1979; in CIAT *Phaseolus vulgaris* Catalog, 1992) or CIAT Accession No. G02 400 (deposited 1970; in CIAT *Phaseolus vulgaris* Catalog, 1992) or CIAT Accession No. G22 215 (deposited 1986; in CIAT *Phaseolus vulgaris* Catalog, 1992) or CIAT Accession No. G22 227 (deposited 1986; in CIAT *Phaseolus vulgaris* Catalog, 1992) or CIAT Accession No. 622 230 (deposited 1986; in CIAT *Phaseolus vulgaris* Catalog, 1992) or CIAT Accession No. G11 891 (deposited 1980; in CIAT *Phaseolus vulgaris* Catalog, 1992) or Kaplan

(Guitarrero Cave, p. 146, 1980) or Hernandez-Xolocotzi et al. (Seminar Series 2E, CIAT, p. 253-258, 1973) or Voysest (Varieties of Beans in Latin America, CIAT, p. 47-50, 1983) or Azufrado Peruano 87 (Secretaria de Agricultura Y Recursos Hidraulicos; Solicitud de Inscripcion en el Registro Nacional de Variedades de Plantas, Registration No. FRI-150288-042, September 25, 1987 at No. 52 and 53, in the IDS filed November 15, 2002) for the reasons of record set forth in the Official Action of September 25, 2002, as modified in the Official Actions of December 2, 2003 and April 15, 2005, in light of the documents filed June 2, 2004, and in light of Pallotini et al (Crop Science 44: 968-977, 2004).

Appellant claims a *Phaseolus vulgaris* field bean plant that produces seed having a yellow seed coat that is from about 7.5 Y 8.5/4 to about 7.5 Y 8.5/6 in the *Munsell Book of Color* when viewed in natural light, as well as propagation material, pollen and seed of said plant. Appellant also claims said field bean plant, and seed thereof, wherein said seed further comprise a hilar ring and wherein said hilar ring is from about 2.5 Y 9/4 to about 2.5 Y 9/6 in the *Munsell Book of Color* when viewed in natural light.

The Examiner maintains that the prior art seeds anticipate or make obvious the claimed seeds. The prior art references all teach deposited *Phaseolus vulgaris* field bean varieties (seed and plants) comprising a yellow seed coat and yellow/tan hilar ring. The Patent Office does not have the facilities for collecting and analyzing seed. Hence, the yellow seed coat of the prior art seed is indistinguishable from a seed having a seed coat of "about" 7.5 Y 8.5/4 to "about" 7.5 Y 8.5/6 in the *Munsell Book of Color* when viewed in natural light, in the absence of evidence to the contrary. Similarly, the yellow/tan hilar ring of the prior art seed is indistinguishable from seed having a hilar ring of "about" 2.5 Y 9/4 to "about" 2.5 Y 9/6 in the *Munsell Book of Color*.

when viewed in natural light, in the absence of evidence to the contrary. The Examiner is unable to determine whether the prior art bean varieties possess characteristics that are not specifically disclosed in the descriptions of said bean varieties. With these conditions, where the product seems to be identical except that the prior art is silent to the characteristic or property claimed, the burden shifts to applicant to provide evidence that the prior art would neither anticipate nor render obvious the claimed invention. Note the case law of *In re Best* 195 USPQ 430, 433 (CCPA 1977).

The burden is on the Appellant to distinguish the instantly claimed seed and plants from the prior art seed and plants. Because propagation material includes seed, propagation material is necessarily taught by the prior art references. Because pollen is a part of the prior art plants, pollen is inherently taught by the prior art references. A cuboid shape to seed taken from the middle of the pod is seen to be inherent in the prior art seed. However, if not inherent, seed with a cuboid shape in the middle of the pod would nonetheless be an obvious morphological variant expected to arise upon cultivation of the prior art plants under a variety of different soils, environmental conditions, cultivation conditions and/or geographic locations. Appellant's further limitation "germinate in an environment free of light" does not further limit the claimed invention. It is well known in the art that seeds of most plants, including *Phaseolus vulgaris*, can germinate in the dark, such as encountered when naturally covered with soil. Therefore, dark germination is an inherent property of the prior art seed.

Further evidence that the instantly claimed Enola bean is indistinguishable from prior art yellow beans is evidenced by Pallotini et al. Pallotini et al have performed a detailed study of

AFLP fingerprints of 24 *Phaseolus vulgaris* cultivars with yellow seeds. Pallotini et al provide evidence that seeds of the deposited Enola bean have an identical genetic fingerprint to seeds of Azufrado Peruano 87 (see the abstract; page 972 at the first full paragraph of the second column; Figure 2, and the last paragraph of page 976, for example). Azufrado Peruano 87 is a yellow-seeded bean from Mexico. Based on the molecular fingerprint, the deposited seed cannot be distinguished from the prior art seed, and Appellant has not provided any evidence to the contrary.

If the prior art *Phaseolus vulgaris* field bean seed does not inherently have a seed coat that is about 7.5 Y 8.5/4 to about 7.5 Y 8.5/6 in the *Munsell Book of Color* when viewed in natural light, does not have a hilar ring that is about 2.5 Y 9/4 to about 2.5 Y 9/6 in the *Munsell Book of Color* when viewed in natural light, and does not have a dry seed weight of about 43 grams per 100 seeds, and hence does not anticipate the claimed *Phaseolus vulgaris* field bean seed, then the claimed field bean seed is nonetheless considered to be an obvious morphological variant of the prior art field bean seed. This is evident particularly in view of the genetic heterogeneity of yellow bean varieties as demonstrated by the Conley Declaration submitted March 25, 2003 and provided as an attachment to the Brief filed October 23, 2006, and further in view of morphological differences that may be due to growing seeds at different locations, in different years and under different environmental conditions that are not a result of genotype. It would have been obvious to one of ordinary skill in the art at the time of Appellant's invention, that among a population of plants of the prior art field bean variety grown in different soils, environmental conditions, cultivation conditions and/or geographic locations, a variation in seed coat, hilar ring color, and dry seed weight would be expected to occur, such that the claimed field



bean plants and seeds would be obvious if not inherent in view of the prior art field bean plants and seeds.

### **(10) Response to Argument**

#### ***A. Claim Rejections - 35 USC § 112, first paragraph, new matter***

Appellant argues that the rejection of the claims under 35 USC § 112, first paragraph, for the introduction of new matter is improper. Appellant states that it is not required that amendments be phrases that are “recited *ipsis verbis* in the description.” In addition, Appellant asserts that one skilled in the art would understand that a distribution of color in a population of seed would be inherent, stating that “a deposit may be claimed according to the description of properties that are inherent to the deposit, even if those properties are not fully disclosed *in haec verba* in the original specification”, citing *In re Nathan*, 328 F. 2d 1005, 1008-1009, 140 USPQ 601, 604 (CCPA 1964). Also, Appellant points to *Kennecott Corp. v. Kyocera Int'l, Inc.*, 835 F.2d 1419, 1421, (Fed. Cir. 1987) as holding that the addition of an inherent property in the disclosure of a subsequent application is not considered new matter. Appellant asserts that the cited case law relates to a broad range of technology from chemical compounds to ceramic products, and therefore is pertinent to a wide range of inventions.

Appellant further argues that the distribution of seed color in the Enola seed coat is normal phenotypic variance due to genetic and/or environmental variance, wherein this is an inherent property of the seeds. Appellant asserts that it is appropriate that the claims be amended to further describe an inherent property of the claimed seeds with the following phrases: “wherein the yellow color plotted as a distribution in the population of the seed of sufficient

number for purposes of ATCC deposit has a peak occurrence ranging from about 7.5 Y 8.5/4 to about 7.5 Y 8.5/6 in the *Munsell Book of Color*, when viewed in natural light”; and “as evidenced by a substantially uniform yellow color of the seed coat, wherein the substantially uniform yellow color plotted as a distribution in a population of the seed of sufficient number for purposes of ATCC deposit has a peak occurrence ranging from about 7.5 Y 8.5/4 to about 7.5 Y 8.5/6 in the *Munsell Book of Color*, when viewed in natural light”. Appellant points to charts 15 and 31 in the Declaration of Gil Waibel (filed with the response of November 15, 2002 and provided as an attachment to the Brief filed October 23, 2006) as providing evidence for the claimed range in seed color.

In addition, Appellant argues that the amendment of the claims complies with MPEP 2163.07(a) in that a distribution of color with a peak occurrence in a seed sample is not just possible or probable, but it is a “statistical representation of phenotypic variance, which will occur in the absence of cloning.” Appellant further asserts that MPEP 2163.07(a) further supports his position in stating that when “a device that inherently performs a function or has a property” is disclosed in a patent application, then the application can later be amended to recite the function or property without it being new matter.

The Examiner maintains that the rejection is proper for the following reasons:

First, Appellant is arguing limitations that are not in the claims. Claims 59-64 are **not** limited to a *Phaseolous vulgaris* seed that is identified as **Enola** nor are said claims limited to seeds of **the deposit**. Appellant’s arguments are largely based on the distribution of seed color

in the Enola seed coat, and the inherency of properties of the deposited seeds. Given that these limitations are not in the claims, these arguments are not persuasive.

Second, while there is no requirement that amendments be phrases that are “recited *ipsis verbis* in the description”, support for the amendment must be found in the application as originally filed.

And third, Appellant deposited the seeds after the application filing date, and therefore any amendments that introduce additional description of the deposited seeds are considered new matter, even if the characteristics are inherent in the seeds of the deposit.

See MPEP 2163 where it states that: “Deposits made after the application filing date cannot be relied upon to support additions to or correction of information in the application as filed.”

Also, see MPEP 2406.01, where it states:

“it must be clear from the application as filed that the invention claimed and described in the specification “was fully capable of being reduced to practice (i.e., no technological problems, the resolution of which would require more than ordinary skill and reasonable time, remained in order to obtain an operative, useful process).” *Feldman v. Aunstrup*, 517 F.2d 1351, 1355, 186 USPQ 108, 113 (CCPA 1975), cert. denied, 424 U.S. 912 (1976).

In addition, see MPEP 2163, where it states:

“see also Deposit of Biological Materials for Patent Purposes, Final Rule, 54 FR 34,864 (August 22, 1989) (“The requirement for a specific identification is consistent with the description requirement of the first paragraph of 35 U.S.C. 112, and to provide an antecedent basis for the biological material which either has been or will be deposited before the patent is granted.” *Id.* at 34,876. “The

description must be sufficient to permit verification that the deposited biological material is in fact that disclosed. Once the patent issues, the description must be sufficient to aid in the resolution of questions of infringement.” Id. at 34,880.). Such a deposit is not a substitute for a written description of the claimed invention. The written description of the deposited material needs to be as complete as possible because the examination for patentability proceeds solely on the basis of the written description. See, e.g., *In re Lundak*, 773 F.2d 1216, 227 USPQ 90 (Fed. Cir. 1985). See also 54 FR at 34,880 (“As a general rule, the more information that is provided about a particular deposited biological material, the better the examiner will be able to compare the identity and characteristics of the deposited biological material with the prior art.”).”

Also see CFR § 1.804 regarding the rules for the time of making an original deposit, which are as follows:

- “(a) Whenever a biological material is specifically identified in an application for patent as filed, an original deposit thereof may be made at any time before filing the application for patent or, subject to § 1.809, during pendency of the application for patent.
- (b) When the original deposit is made after the effective filing date of an application for patent, the applicant must promptly submit a statement from a person in a position to corroborate the fact, stating that the biological material which is deposited is a biological material specifically identified in the application as filed.”

Appellant submitted the required statement for deposit after the effective filing date in the parent application 08/749,449 in the response of February 24, 1998. Appellant stated at page 3:

“A deposit of novel field bean seed has been deposited under the terms of the Budapest Treaty with the American Type Culture Collection on December 11,

1997, not November 12, 1996, as stated in the specification. The specification has been amended to contain the date of deposit and the accession number for the deposit. The specification contains a description of the deposited biological material sufficient to specify it and to permit examination"; and at page 4

"The undersigned attorney herewith states that seed of the field bean cultivar Enola were deposited with the American Type Culture Collection, (ATCC) . . . on December 11, 1997 under the terms of the Budapest Treaty and that this seed received Accession Number 209549 . . . The date of this deposit is after the U.S. filing date of the application. The undersigned attorney also states that the deposited seed is the same seed as described in the specification."

The Examiner maintains that the subject matter now claimed was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor, at the time the application was filed, had possession of the claimed invention.

The specification, as originally filed, described the seed of the invention as:

"a field bean *Phaseolous vulgaris* cultivar that produces seed having a distinctive yellow color. The yellow color is present throughout the entire seed coat and remains uniform and stable season after season, when viewed in natural lighting." (column 2, lines 58-62).

"The field bean cultivar Enola produces a distinct and completely yellow colored seed. The yellow color of the seed remains uniform and stable from season to season." (column 1, lines 46-51).

"Enola seed possesses a unique yellow color, matching most closely to 7.5 Y 8.5/4 to 7.5 Y 8.5/6 in the *Munsell Book of Color*, when viewed in natural light." (column 3, lines 32-34).

“The cultivar has shown uniformity and stability for all traits, as described in the Example 1, which contains a description of variety information.” (column 4, lines 30-32).

“No variants have been observed or are expected in Enola.” (column 4, lines 36-37).

The description provided of the seeds of the claimed invention reiterates throughout the specification that the seeds are uniformly a distinctive and unique yellow color that matches most closely with the narrow range of 7.5 Y 8.5/4 to 7.5 Y 8.5/6 in the *Munsell Book of Color*, when viewed in natural light. Nowhere in the specification does it teach or suggest that the seeds of the invention encompass an entire distribution of yellow seed coat colors, wherein there is a peak occurrence of seed coat color in the range 7.5 Y 8.5/4 to 7.5 Y 8.5/6 in the *Munsell Book of Color*, when viewed in natural light.

The amendments introduced into claims 59 and 62 broaden the claims to encompass any seed that would fall within a distribution of yellow colored seed and would, therefore, encompass any seed having a seed coat of any shade of yellow. In addition, any given population of seeds will have a unique distribution of color and a unique peak occurrence. Yet, the present specification does not describe any range of color beyond 7.5 Y 8.5/4 to 7.5 Y 8.5/6 in the *Munsell Book of Color*. Furthermore, the seeds were deposited on December 11, 1997, which is after the earliest effective filing date of the application. Therefore, additional information related to describing the deposit is considered new matter. Appellant cannot rely on the post filing date deposit of seed to support the introduction of any new description, even if it is inherent.

The Examiner maintains that the rejection is proper given that no support was provided in the specification as originally filed for the present wording of the claims, as stated in the Office Action of April 15, 2005 and for the reasons set forth above.

***B. Claim Rejections - 35 USC § 112, first paragraph, written description***

Appellant asserts that the rejection of the claims under 35 USC § 112, first paragraph, for lack of written description should be withdrawn. Appellant argues that a preponderance of evidence has not been provided by the Examiner that “Appellant has not identified what feature or features distinguish the claimed seeds from other known *Phaseolous vulgaris* seeds” and that “Appellant has not set forth what the uniform and stable characteristics are that distinguish the claimed seeds from other known *Phaseolous vulgaris* seeds”. Appellant asserts that “It is well known that variation within a cultivar can produce a range of sizes, shapes and colors”, and that “uniform and stable traits can best be described as a distribution”. Appellant states that “the Examiner appears to be imposing a stringent test for stability and uniformity that borders on requiring clones”, yet asserts that the Examiner and Appellant are in agreement “that possession of the invention may be demonstrated without elucidation of a genetic sequence.” Appellant further states that possession of the invention is demonstrated by the deposited seeds, and that the “description is exacting enough that a potential infringer would easily know whether or not he was infringing.”

The Examiner maintains that the rejection is proper given that Appellant has not provided an adequate written description of the deposited mixture of seeds, given that in the response filed March 25, 2003, Appellant asserted on the record that the seeds deposited as ATCC Accession

Number 209549 represent a variety of genetic entities with phenotypic variation exhibiting ranges of sizes, shapes and colors, both of seed coat and hilar ring.

The specification, as originally filed, described the seed of the invention as:

“a field bean *Phaseolous vulgaris* cultivar that produces seed having a distinctive yellow color. The yellow color is present throughout the entire seed coat and remains uniform and stable season after season, when viewed in natural lighting.” (column 2, lines 58-62).

“The field bean cultivar Enola produces a distinct and completely yellow colored seed. The yellow color of the seed remains uniform and stable from season to season.” (column 1, lines 46-51).

“Enola seed possesses a unique yellow color, matching most closely to 7.5 Y 8.5/4 to 7.5 Y 8.5/6 in the *Munsell Book of Color*, when viewed in natural light.” (column 3, lines 32-34).

“The cultivar has shown uniformity and stability for all traits, as described in the Example 1, which contains a description of variety information.” (column 4, lines 30-32).

“No variants have been observed or are expected in Enola.” (column 4, lines 36-37).

However, Appellant is now arguing that the seeds deposited as ATCC Accession Number 209549 represent a variety of genetic entities with different phenotypes. In addition, Appellant has submitted the Declaration of Laura L. Conley (filed March 25, 2003 and provided as an attachment to the Brief filed October 23, 2006 at pages 100-123) as further evidence of the genetic diversity among the deposited seeds and plants (response filed March 25, 2003, p. 6, third paragraph). The Declaration discusses AFLP evidence presented as expert testimony by Paul Gepts during litigation to demonstrate the genetic diversity among individual plants of the



Enola bean deposited with ATCC. In particular, individuals 1, 51, 52 and 53 are compared, and shown to differ using multiple AFLP markers (see the Conley Declaration filed March 25, 2003, numbers 10-15, Exhibits A and B). Hence, Appellant asserts that the cultivar of the invention came from a variety of yellow beans. Yet, these assertions made by Appellant appear to contradict statements set forth in the patent disclosure. In fact, Appellant asserts in the disclosure that the plants were selected over numerous generations and that **no variant traits** were observed. See patent specification at column 2, line 67 - column 3, line 29, where it states:

"The cultivar has shown uniformity and stability for all traits, as described in the Example 1, which contains a description of variety information. The cultivar has been self-pollinated a sufficient number of generations, with careful attention to uniformity of plant type to ensure phenotypic stability. The cultivar has been increased with continued observation for uniformity. No variant traits have been observed or are expected in Enola." (patent specification, col. 4, lines 30-38).

Furthermore, while a deposit **may** meet the requirement for written description, the written description at the time of filing of the patent application must be consistent with the material that is deposited. Again see MPEP 2163, where it states:

"Deposit of Biological Materials for Patent Purposes, Final Rule, 54 FR 34,864 (August 22, 1989) ("The requirement for a specific identification is consistent with the description requirement of the first paragraph of 35 U.S.C. 112, and to provide an antecedent basis for the biological material which either has been or will be deposited before the patent is granted." Id. at 34,876. "The description must be sufficient to permit verification that the deposited biological material is in

fact that disclosed. Once the patent issues, the description must be sufficient to aid in the resolution of questions of infringement.” Id. at 34,880.). Such a deposit is not a substitute for a written description of the claimed invention. The written description of the deposited material needs to be as complete as possible because the examination for patentability proceeds solely on the basis of the written description. See, e.g., *In re Lundak*, 773 F.2d 1216, 227 USPQ 90 (Fed. Cir. 1985). See also 54 FR at 34,880 (“As a general rule, the more information that is provided about a particular deposited biological material, the better the examiner will be able to compare the identity and characteristics of the deposited biological material with the prior art.”).

In addition, the Examiner points to *Enzo Biochem, Inc. v. Gen-Probe Inc.*, 323 F.3d at 969 where it states:

“Application of the written description requirement, however, is not subsumed by the ‘possession’ inquiry. A showing of ‘possession’ is ancillary to the statutory mandate that ‘[t]he specification shall contain a written description of the invention,’ and that requirement is not met if, despite a showing of possession, the specification does not adequately describe the invention.”

And at *Enzo Biochem*, 323 F.3d at 963, 63 USPQ2d at 1613, where it states:

"Compliance with the written description requirement is essentially a fact-based inquiry that will necessarily vary depending on the nature of the invention claimed. "

Furthermore, the Examiner maintains that the Federal Circuit has held that “the inventor cannot lay claim to that subject matter unless he can provide a description of the compound sufficient to distinguish infringing compounds from non-infringing compounds, or infringing

methods from non-infringing methods.” See *University of Rochester v. G.D. Searle & Co., Inc.*, 358 F.3d 916, 925, 69 USPQ2d 1886, 1893 (Fed. Cir. 2004). *Id.* At 926, 69 USPQ2d at 1894.

In the present application, the description of the Enola seeds provided in the specification is significantly different from the description of the seeds provided in Appellant’s responses and in the Declarations submitted by Appellant. While there may be some minor morphological variation in seeds of a given cultivar, the amount of variation that is now asserted by Appellant would not be understood by one skilled in the art upon reading the specification.

The Examiner maintains that Appellant has provided arguments and evidence that the deposited seeds have many traits that are **not** stable and uniform. Yet, Appellant has not identified what trait or traits are uniform and stable which distinguish the claimed seeds from others of the same species. Appellant is reminded that a cultivar is a cultivated variety of a plant that “has been selected for some feature that distinguishes it from the species from which it is selected” (see the website [usna.usda.gov/Gardens/glossary.html](http://usna.usda.gov/Gardens/glossary.html) at Prior Art NPL document 5 dated April 14, 2005).

Given the inconsistency between the written description provided in the specification and Appellant’s interpretation of that description, as evidenced by the Appellant’s responses, one skilled in the art would not be able to distinguish infringing compounds from non-infringing compounds.

Furthermore, with regard to claims 59 and 62, which have been amended to recite the following phrases:

“wherein the yellow color plotted as a distribution in the population of the seed of sufficient number for purposes of ATCC deposit has a peak occurrence ranging from about 7.5 Y 8.5/4 to about 7.5 Y 8.5/6 in the *Munsell Book of Color*, when viewed in natural light”; and

“as evidenced by a substantially uniform yellow color of the seed coat, wherein the substantially uniform yellow color plotted as a distribution in a population of the seed of sufficient number for purposes of ATCC deposit has a peak occurrence ranging from about 7.5 Y 8.5/4 to about 7.5 Y 8.5/6 in the *Munsell Book of Color*, when viewed in natural light”,

the specification, as originally filed, does not provide a written description that supports the range of yellow seed coat colors that are encompassed by these claims, as amended.

In view of the lack of written description of the claimed seeds, one skilled in the art would not be able to distinguish infringing compounds from non-infringing compounds. The Examiner maintains that the claimed invention is not fully described in the specification, as evidenced by Appellant’s arguments and the Declarations of Conley with reference to Gepts. It appears that Appellant intends to claim a large genus of genotypes and phenotypes that have not been described in the specification, given Appellant’s own assertions that the seed deposit comprises phenotypically varied seeds, and given the amendment of claims 59 and 62 to read on seeds that are not within the range of 7.5 Y 8.5/4 to about 7.5 Y 8.5/6 in the *Munsell Book of Color*.

Finally, the Examiner thanks Appellant for clarification with regard to the typographical error at column 4, line 60, where it should read “now”, instead of “not”. If there is a

determination of allowable subject matter, the Examiner will amend the specification by Examiner's amendment as now requested by Appellant.

***B. Claim Rejections - 35 USC § 112, first paragraph, enablement***

Appellant asserts that the rejection of the claims under 35 USC § 112, first paragraph, for lack of enablement is improper. Appellant argues that the deposit comprises "a population of seeds displaying a normal variation in size, shape, color and other traits", stating that "the seeds are not phenotypically varied, but they display normal phenotypic variance." In addition, Appellant states "the Enola cultivar comprises a plurality of individuals that share one or more uniform and stable traits." Appellant also asserts that the Declaration of Gil Waibel (filed November 15, 2002 and provided as an attachment to the Brief filed October 23, 2006 at pages 51-58) at item #42 references charts 15 and 31, which clearly show that the peak occurrence of Enola seed coat color occurs between 7.5 Y 8.5/4 to 7.5 Y 8.5/6 with 85% and 80% of the seeds in charts 15 and 31 in that range. Appellant again states that there is heterogeneity of the seeds, which results in phenotypic variance, but that "each and every seed on deposit belongs to the Enola cultivar" (see the Brief at page 13, line 3). Therefore, Appellant argues "one of skill in the art could easily reproduce the claimed invention" by "accessing the ATCC deposit, as any seed on deposit would produce a plant of the claimed cultivar" (see the Brief at page 13, lines 3-5). Finally, Appellant states that the Examiner asserted that there is only a single legal purpose for the seed deposit, when biological deposit is accepted for meeting both written description and enablement.

The Examiner maintains that the enablement rejection is proper. As previously stated, the Declaration of Gil Waibel of November 15, 2002 describes variation in Enola, see beak orientation (#26, #35) and pod color (#31). With regard to the primary color of seed coat (#42) it is asserted that “most” of the seed was in the color range of Munsell 5Y 8.5/4 to 7.5Y 8/8, which is different from the seed color range claimed and disclosed in the specification. While Charts 15 and 31 appear to show the range recited by Appellant of Munsell 7.5 Y 8.5/4 to 7.5 Y 8.5/6, the text at #42 recites Munsell 5Y 8.5/4 to 7.5Y 8/8. Appellant has not responded to the Examiner’s concerns regarding this discrepancy. In addition, the seed weight (#48) is quite different for Enola in the two studies cited.

The Examiner maintains that Appellant has not identified any selected traits that are stable and uniform and that differentiate the claimed seeds and plants from other known *Phaseolus vulgaris* seeds and plants. The Examiner maintains that Appellant and the Declaration of Gil Waibel both have described the deposited seeds as varied in phenotype, as stated above. It is not understood what Appellant means by saying that “the seeds are not phenotypically varied, but they display normal phenotypic variance” (see page 12, lines 13-14 of the Brief of October 23, 2006). Clearly, either way there is phenotypic variation. Again Appellant is reminded that a cultivar is a cultivated variety of a plant that “has been selected for some feature that distinguishes it from the species from which it is selected” (see the website [usna.usda.gov/Gardens/glossary.html](http://usna.usda.gov/Gardens/glossary.html) noted above). In the present case, Appellant has not identified what feature or features distinguish the claimed Enola seeds from other known *Phaseolus vulgaris* seeds.

Appellant has not provided guidance with regard to how one skilled in the art would select from the heterogeneous seeds that are deposited to identify individuals that would have the stable and uniform traits that Appellant is apparently using to define the Enola yellow beans, but has failed to set forth in the specification. In fact, Appellant argues that all of the deposited bean seeds are considered to be Enola yellow beans despite the asserted phenotypic variation. The Examiner maintains that it would require undue experimentation by one skilled in the art to practice the claimed invention, in view of the heterogeneity of the seeds of the deposit, and for the reasons already of record.

The Examiner restates that one purpose of the deposit of seed is to provide a reproducible means of making a unique plant that cannot be recreated based on a patent disclosure. A deposit of biological material may also provide support for written description, as previously discussed. Nevertheless, the deposit of a phenotypically varied population of seeds does not allow one of skill in the art to reproduce the same invention disclosed by Appellant in the specification. Each sample of seed obtained from the ATCC would consist of a different mixture of seed and result in a different heterogeneous population of plants.

Furthermore, there is uncertainty with regard to the origins of the claimed seeds. Appellant has stated at page 24 of the Appeal Brief “the date for beginning development of Enola in the patent and PVP Certificate are incorrect”. The Enola yellow bean patent application and Plant Variety Protection Certificate state that Mexican beans were acquired in 1994. Appellant has now stated that this information is incorrect. However, Appellant has not provided any information with regard to the circumstances surrounding this error or to the actual origins and ancestry of the claimed seeds.

***C. Claim Rejections - 35 USC § 112, second paragraph***

Appellant asserts that the rejections of the claims under 35 USC § 112, second paragraph are improper. With regard to claims 1-7 Appellant argues “the seeds deposited with the ATCC are seeds of a single cultivar (Enola), which is comprised of a plurality of individuals that have unique genetic profiles” (in the Brief filed on October 23, 2006 at page 13, the last full paragraph). In addition, Appellant asserts that “[S]ince the Enola phenotype is stable and uniform in multiple environments, we must assume that at least part of the genotype (responsible for the visible properties) is uniform” (in the Brief filed on October 23, 2006 at page 14, lines 8-9). Appellant states that the phenotypic language of the claims is “exacting enough that a potential infringer would know whether or not he was infringing”, asserting that “the claims define the invention using phenotypic language”, therefore Appellant fails to understand why the Examiner argues that “the specification does not define the full range of seed . . . genotypes that are comprised in the deposit” (in the Brief filed on October 23, 2006 at page 14, the first full paragraph).

The Examiner maintains that rejected claims 1-7, drawn to the deposited seeds, have no phenotypic language in the claims to define the claimed seeds. The deposited seeds are defined by the written description that is provided in the specification. However, this definition is inconsistent with Appellant’s interpretation of the description of the deposited seeds, as put forth in Appellant’s arguments and supporting documents, as stated *supra*. In fact, Appellant has stated on the record that the seeds are heterogeneous in phenotype and there is also evidence of



genetic diversity in the seeds that are deposited as ATCC Accession number 209549. It is clear that the specification does not define the full range of seed phenotypes and genotypes that are comprised in the deposit, such that one skilled in the art would be able to determine what materials would infringe the claim, as set forth in the arguments above for the rejections under 112, first paragraph for new matter, written description and enablement. However, Appellant is stating that the deposited Enola seeds are “comprised of a plurality of individuals that have unique genetic profiles”. The Examiner maintains that claims drawn to the deposited Enola field bean seeds are indefinite, wherein the language of the claims, as defined in the specification, does not set forth the metes and bounds of the claimed invention.

With regard to the rejection of claims 59-64 under 35 USC 112, second paragraph, Appellant argues that the following phrases are comprehensible to one skilled in the art of plant breeding. The phrases are as follows:

“wherein the yellow color plotted as a distribution in the population of the seed of sufficient number for purposes of ATCC deposit has a peak occurrence ranging from about 7.5 Y 8.5/4 to about 7.5 Y 8.5/6 in the *Munsell Book of Color*, when viewed in natural light”; and

“as evidenced by a substantially uniform yellow color of the seed coat, wherein the substantially uniform yellow color plotted as a distribution in a population of the seed of sufficient number for purposes of ATCC deposit has a peak occurrence ranging from about 7.5 Y 8.5/4 to about 7.5 Y 8.5/6 in the *Munsell Book of Color*, when viewed in natural light”.

Appellant asserts that recording phenotypic observations as a function of frequency is standard in plant breeding, citing the use of 2500 seeds as representing “a population of the seed in sufficient number for purposes of ATCC deposit”, wherein the phenotypic variance will have a peak occurrence in the specified color range.

The Examiner maintains that these claims encompass a vast range of seed populations of varied number and color distribution. In addition, the claims are drawn to “[S]eed”, which may be interpreted as singular or plural, wherein any single seed from a population of *Phaseolus vulgaris* having a yellow seed coat plotted as a distribution in a population of seed having a peak occurrence ranging from about 7.5 Y 8.5/4 to about 7.5 Y 8.5/6 in the *Munsell Book of Color*, would encompass any seed that can be categorized as having a yellow seed coat of any shade of yellow and not limited to those in the color range set forth in the claims. While a plant breeder may understand plotting a phenotypic distribution of a population of seed, every seed population would have its own phenotypic distribution and peak occurrence range. One skilled in the art would not be clear with regard to the metes and bounds of the claimed invention.

#### ***D. Claim Rejections - 35 USC § 102 or 103***

Appellant argues that the prior art rejections should be withdrawn for the following reasons:

Appellant asserts that the rejection of the claims under 35 USC 102(b) or 103(a) is improper given that Appellant has been unable to obtain the seeds taught by any of Kaplan, Hernandez, Voysest or Gepts. Appellant states that “the Examiner has been provided with everything that Appellant and his colleagues have been able to find.”

The Examiner maintains that the beans taught by Voysest are Azufrado Peruano 87. The Azufrado Peruano 87 beans were available to Pallottini et al during the prosecution of this application. The Azufrado Peruano 87 beans were used in the research of Pallotini et al and resulted in the publication of 2004. It is unclear why Appellant has not been able to obtain the same seeds. Appellant's assertion that these beans are unavailable is not persuasive. However, the rejection of the claims over the Gepts reference is now withdrawn.

Appellant also argues that the Examiner's statement that the Polly Proctor Declaration provides evidence that the bean seeds are clearly anticipated is "meritless" (in the Brief filed on October 23, 2006 at page 16, the 3rd full paragraph). However, Appellant does not explain why.

Appellant believes that the rejection over the Peruano 87 reference should be withdrawn given that it was relied upon in the testimony of Dr. Pfeiffer, and "Dr. Pfeiffer vacillated extensively in answering the deposition questions of relevance" (in the Brief filed on October 23, 2006 at page 17, lines 4-5) The Examiner maintains that there is overwhelming evidence to support the rejection without the testimony of Dr. Pfeiffer.

Next Appellant asserts that the color comparisons set forth in the Declaration of Polly Proctor show that the prior art seeds do not anticipate the claims. Appellant argues that the recitation of "about" in the claims does not encompass Munsell color squares that surround 7.5 Y 8.5/4 and 7.5 Y 8.5/6. Appellant explains that the color matches to the Munsell color squares are not always perfect, but as stated in the specification it is the yellow "matching most closely to

7.5 Y 8.5/4 and 7.5 Y 8.5/6.” Appellant further states that the use of the word “about” in the claims was so that “people would not be able to avoid his patent claims with beans that were not the exact shade of the squares he specified.” Appellant argues that he does not intend to have claim coverage to a bean that would match a Munsell color square other than 7.5 Y 8.5/4 and 7.5 Y 8.5/6. Finally, Appellant asserts that it was the intent of the Examiner to discredit Ms. Proctor’s work.

Appellant’s arguments are not persuasive for the following reasons:

First, the Examiner maintains that the use of the preposition “about” with regard to the range of yellow shades in the Munsell color chart, broadens the claim to encompass shades of yellow that are outside the specified color squares. In addition, Appellant has not provided a definition in the specification with regard to the phrase “about 7.5 Y 8.5/4 and 7.5 Y 8.5/6” for the seed coat color, or the phrase “about 2.5 Y 9/4 to about 2.5 Y 9/6” for the hilar ring, that would define these phrases as limiting the range of color to avoid overlap with adjacent squares in the Munsell color chart. In the absence of a definition that limits the breadth of the claims, the claims are broadly interpreted to read on other shades of yellow. Appellant is arguing limitations that are not in the claims and are not defined in the specification. In addition, by the amendment of claims 59 and 62 to claim any seed from a population of yellow seeds that have a distribution of yellow color with a *peak occurrence* ranging from “about 7.5 Y 8.5/4 and 7.5 Y 8.5/6”, claims 59-64 read on any seed that is any shade of yellow.

Second, as stated previously, Appellant has asserted that the claimed deposited seeds of Enola yellow bean comprise a range of colors, sizes and shapes. Therefore, it remains uncertain what the characteristics of the claimed seeds are, and how the claimed seeds differ from any of

the prior art seeds. In fact, in the response of March 25, 2003, Appellant describes the phenotypic variation of the deposited seed, and the Declaration of Gil Waibel (submitted with the response filed November 15, 2002 and provided as an attachment to the Brief filed October 23, 2006 at pages 40-48), describes variation in Enola, see beak orientation (#26, #35), pod color (#31). With regard to the primary color of seed coat (#42) it is asserted that "most" of the seed was in the color range of Munsell 5Y 8.5/4 to 7.5Y 8/8, which is a broader range than set forth in the claims and the specification. In view of the broad range of color identified by Waibel, the prior art cultivars anticipate the claims.

Third, the Examiner maintains that the evidence provided in the Declaration of Polly Proctor (submitted with the response of June 2, 2004 and provided as an attachment to the Brief filed October 23, 2006), supports the rejection of the claims over the prior art seeds CIAT Accession No. G13 094, CIAT Accession No. G02 400, CIAT Accession No. G22 215, CIAT Accession No. G22 227, CIAT Accession No. 622 230, CIAT Accession No. G11 891. Appellant states that since only one of the seed coat colors matched a color square on the 7.5 Y page, that the other color readings are not so similar that they would either match adjacent squares or otherwise be encompassed by the term "about". The Examiner maintains that the Munsell color chart is based on a three-dimensional color spectrum that has an axis for each of: hue, chroma and value. So, while a color square may not be present on the same page and adjacent to 7.5 Y 8.5/4 and 7.5 Y 8.5/6, a color square may still be adjacent in the three-dimensional spectrum. In the present case, adjacent squares also will be on the 5 Y page or the 10 Y page. All of the seed coat colors presented in the Declaration of Polly Proctor are on the 5 Y, 7.5 Y and 10 Y pages. The hilar rings also all have colors that most closely match a yellow

shade. And again the Examiner maintains that the broad description of the deposited seeds provided by Appellant and the broad language of the claims support the rejection of the claimed seeds over the prior art seeds.

Appellant appears to be extending the scope of the invention by each of the following: the broad description asserted in the responses; the use of "about" in the claims; and by the amendment of claims 59 and 62 to claim any yellow seed from a population of yellow seeds that have a distribution of yellow color with a peak occurrence ranging from "about 7.5 Y 8.5/4 and 7.5 Y 8.5/6". The Examiner maintains that the broad description of the deposited seeds provided by Appellant and the broad language of the claims support the rejection of the claims over the prior art seeds.

In addition, it is not the Examiner's intent to discredit anyone's work. The color analysis presented in the Declaration must be evaluated in view of the breadth of the claim language. Also, while Polly Proctor may be very skilled in color analysis, she is not a disinterested third party given that she is related to the Appellant, as stated in the previous Office Actions (see page 18 of the Office Action of December 21, 2005 and Pages 11-12 of the Office Action of April 14, 2005).

Further arguing the rejection under 102(b) or 103(a), Appellant brings up the teachings of Bassett (provided in the Evidence Appendix attached to the Brief filed October 23, 2006) and the Expert report of Gepts (which was submitted with the March 25, 2003 Declaration of Laura Conley), although it is unclear why (see page 20, first paragraph of the Brief filed October 23, 2006).

With regard to the Pallottini et al reference, Appellant asserts that these results concur with Appellant's position that Enola resulted from a selection process on beans that were most likely of Mexican origin. Appellant then alleges that the Pallottini research used selective and biased data by stating that it is "little more than a reprint of the Expert Report of Paul Gepts, Ph.D., which was submitted with the March 25, 2003 Declaration of Laura Conley (see page 20, the last full sentence in the Brief filed October 23, 2006). Appellant asserts that the study selected certain Enola seeds from the ATCC deposit, while the researchers knew that there were at least two haplotypes in the sample. Appellant argues that the results were biased toward similarity between Enola and Azufrado Peruano 87, because the research selected for the Enola seeds that were the same haplotype. Appellant also asserts "the Pallotini publication shows that it is more unlikely than likely that Enola resulted from Azufrado Peruano 87 without crossing."

The Examiner maintains that seed of the Enola ATCC deposit is anticipated by Azufrado Peruano 87, as seeds of the deposit are identical to the prior art seeds, as evidenced by Pallotini et al. Claim 1 is drawn to the singular "[A] . . . seed". The rest of the claims are either dependent on claim 1 or are more broadly drawn to any *Phaseolus vulgaris* seed having a seed coat color of "about 7.5 Y 8.5/4 to about 7.5 Y 8.5/6 in the *Munsell Book of Color* when viewed in natural light" or any *Phaseolus vulgaris* seed in a distribution of yellow seeds that have a peak occurrence in that range. Therefore, any Azufrado Peruano 87 seed that is identical to any seed of the deposit anticipates the claims. It is not relevant to the determination of anticipation whether or not the experiment of Pallotini was biased to one haplotype of the deposited seeds. If any seeds of the deposit are the same as Azufrado Peruano 87, then the claims are anticipated.

Therefore, the prior art Azufrado Peruano 87 seeds anticipate seeds of the Enola ATCC deposit of claims 1-7, as well as the seeds encompassed by claims 8-15, 51, 52 and 56-64. In addition, the probability that crossing occurred during the selection process is not relevant in determining anticipation of the seed, wherein the process of making a seed would not necessarily confer a patentable distinction to the seed encompassed by the claims.

Finally, Appellant asserts that the bean seeds taught by Kaplan, Hernandez-Xolocotzi and Voysest differ from the claimed Enola bean seeds by average size or grams/100 seeds, for example. Appellant further states that the Examiner is imposing a high evidentiary standard in saying that the differences provided were not shown to be statistically significant. Appellant has used the limited descriptions provided in the references to rebut their rejection. In addition, Appellant states at page 22, the last four lines in the Brief filed October 23, 2006, that "The ultimate determination of patentability must be based on consideration of the entire record, by a preponderance of evidence . . . ", citing *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992), and argues that Appellant has provided a preponderance of evidence to overcome the rejection.

The Examiner maintains that the record clearly reflects that there is heterogeneity within the Enola bean seed of the deposit. The preponderance of evidence in the entire record is that the claimed yellow beans, including those of the deposit, are varied in yellow color, in shape and in size, as previously stated. Appellant has not established that average size and weight are stable and uniform characteristics that distinguish the claimed Enola cultivar. Furthermore, the Examiner maintains that the rejection under 35 USC 102 or 103 is appropriate when the USPTO



does not have sufficient facts to determine whether claimed products are “inherently the same”.

The USPTO cannot conclude that the subject matter would have been obvious since it cannot determine whether the products differ. The United States Patent and Trademark Office is not equipped with facilities to evaluate the seed coat color of beans, and hence the Examiner is not in a position to determine the precise color of the prior art beans that are described in printed publications as having a yellow seed coat. The requirement of 102 is that Appellant be the first to invent the claimed invention. Hence, examiner need be confident that Appellant is the first to invent and that Appellant has indeed discovered a novel trait that was not previously known in the prior art.

Furthermore, the Examiner notes that the instant rejection is a 102/103 rejection. The rejection clearly sets forth that due to the effects of different soils, environmental conditions, cultivation conditions and geographic conditions on the phenotypic characteristics of all plants, including beans, the claimed beans, with vaguely and/or broadly defined phenotypic characteristics, are held to be morphological variants of the prior art lines, if not anticipated by the prior art lines, in the absence of evidence to the contrary. The Declaration of Gil Waibel (submitted with the response filed November 15, 2002 and provided as an attachment to the Brief filed October 23, 2006 at pages 40-48) discusses the effect of environment on bean phenotype stating “[P]lants show slight differences in how they develop each year depending on the environment they grow in” (the sentence bridging pages 1-2).

The Examiner is not in a position to definitively make either a sole conclusion of inherency/anticipation or a sole conclusion of obviousness since the record does not allow one to

determine if and how the claimed subject matter differs from the prior art. Accordingly, the burden has shifted to Appellant to provide evidence that the prior art neither anticipates nor renders obvious the claimed invention. Note the case law of *In re Best* 195 USPQ 430, 433 (CCPA 1977). However, in the present case and in view of the entire record of the case, Appellant has not provided evidence that distinguishes the claimed seeds over the prior art seeds. In view of Appellant's broad claims encompassing all beans of *Phaseolus vulgaris* having a seed coat of about a particular yellow color range, it is submitted that it is indeed Appellant's burden to demonstrate that none of the prior art beans have a yellow seed coat in the claimed range. Appellant has provided no credible evidence to convince the Examiner that Appellant has indeed discovered a novel trait that was not previously known in the art.

Appellant sets forth in the specification (at column 2, line 63 to column 3, line 29) that he obtained beans having the yellow seed coat from a bag of seeds purchased in Mexico. However, the specification does not indicate that any selection steps were made based on seed coat color. Therefore, the examiner has fair reason to question the novelty of the broadly claimed invention. Furthermore, there remains confusion with regard to the origins, dates and selection of the claimed seeds and Appellant has not been forthcoming in setting the record straight with regard to the year in which he began development of the claimed Enola yellow bean seeds. Appellant has admitted at page 24 of the Brief filed October 23, 2006 "the date for beginning development of Enola in the patent and PVP Certificate are incorrect". The patent specification and the PVP Certificate state that a bag of yellow beans was purchased in Mexico and brought to the United States in 1994 and that selection of the seeds began that year.

However, the Larry Proctor Declaration of March 25, 2003 contradicts the above statements regarding the beginning and duration of the Enola breeding period. Appellant submitted the Declaration of Larry Proctor with the response filed March 25, 2003 to clarify how the Enola bean variety was developed from the seed acquired in Mexico. Specifically, Appellant asserted that upon returning from Mexico, he "sorted out from the bag of beans those that had approximately yellow colored seed coats. The resultant collection varied from light to dark tan. Stated in terms of the *Munsell Book of Color*, these beans fell on various shades of the 2.5 Y page." Appellant, further asserted that contrary to the disclosure in the patent, Appellant began breeding in 1991 and completed breeding in 1997 (response filed, March 25, 2003, pages 14-15). The Declaration of Larry Proctor states that the beans were acquired in June or July of 1991, and that the yellow beans were separated out and were not uniform in color and shape. It also states that between 1991 and 1995 the beans were bred through multiple generations, plants with undesirable appearances were rogued, and that each generation the seeds were more uniform in shape and color (Larry Proctor Declaration filed March 25, 2003 at pages 1-3).

Appellant's remarks regarding development of the Enola bean variety from 1991 to 1997 are noted, however the disclosure of the patent is not changed by Appellant's contemporaneous assertions.

In summary, the Examiner maintains that that the claims are either anticipated by or obvious over the prior art yellow bean seeds for the following reasons:

- 1) The language of the claims is indefinite and therefore the metes and bounds of the claims cannot be determined.

- 2) The claims are broadly interpreted to encompass *Phaseolus vulgaris* seeds having a seed coat that is any shade of yellow. The claimed seeds may have a seed coat color in the range of about 7.5 Y 8.5/4 to about 7.5 Y 8.5/6 in the *Munsell Book of Color*. However, the claimed seeds are not limited to having a seed coat color within that range of yellow, given the language of the claims and Appellant's description of the deposited seeds.
- 3) The written description of the deposited seeds that is set forth in the specification does not correspond to the written description provided by Appellant in the responses.
- 4) Evidence provided by Appellant demonstrates that environmental factors can have a significant effect on the phenotypic characteristics of yellow bean seeds.
- 5) Appellant has admitted on the record that the date for beginning selection of the Enola bean seeds is incorrect in both the issued patent and in the PVP Certificate. There is continued uncertainty with regard to the origins of the seeds designated as Enola and the dates of selection of the disclosed and deposited seeds.
- 6) Numerous yellow bean seeds were taught in the prior art and are available.
- 7) The Azufrado Peruano 87 seeds that were known and available yellow beans that originated in Mexico have been shown to have an identical genetic fingerprint to Enola bean seeds of Appellant's deposit.

#### ***Information Assessment***

With regard to the Requirement for Information under 37 C.F.R. 1.105, Appellant asserts that his invention was developed in secrecy and he filed his application less than one year prior to the first public disclosure of the invention. Appellant also states that he is "unaware of sales

or public use by third parties in the United States at the time of the original purchase and/or prior to the filing date of the instant patent.”

Appellant also states that “Appellant has stated that the date for beginning development of Enola in the patent and PVP Certificate are incorrect; however, the manner which it was derived is correct.”

The Examiner responds that Appellant has admitted that the date for beginning development of the Enola yellow bean seeds is incorrect both in the patent and in the PVP Certificate. The specification states that the inventor purchased the field bean seeds in Mexico, brought them to the United States in 1994, and planted selected seeds in Montrose County, Colorado that year. The specification goes on to state that selection of seeds continued in the successive years of 1995 and 1996. However, Appellant has not provided a statement regarding the correct date or dates of the selection method. Nor has Appellant provided any information with regard to the circumstances surrounding this error. It is unclear how the manner that the bean was derived can be correct, when the dates of selection are an integral part of the method. The response to the Request for Information under 37 C.F.R. 1.105 is incomplete.

**(11) Related Proceeding(s) Appendix**

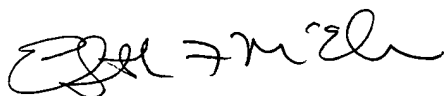
No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner’s answer.

**Conclusion**

For the above reasons, it is believed that the rejections should be sustained.

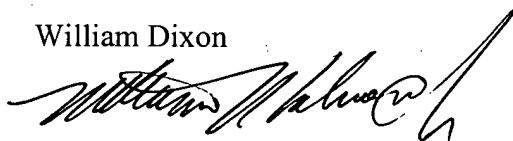
Respectfully submitted,

Elizabeth F. McElwain

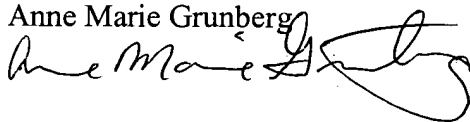
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Conferees:

William Dixon

A handwritten signature in cursive script, appearing to read "William Dixon".

Anne Marie Grunberg

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